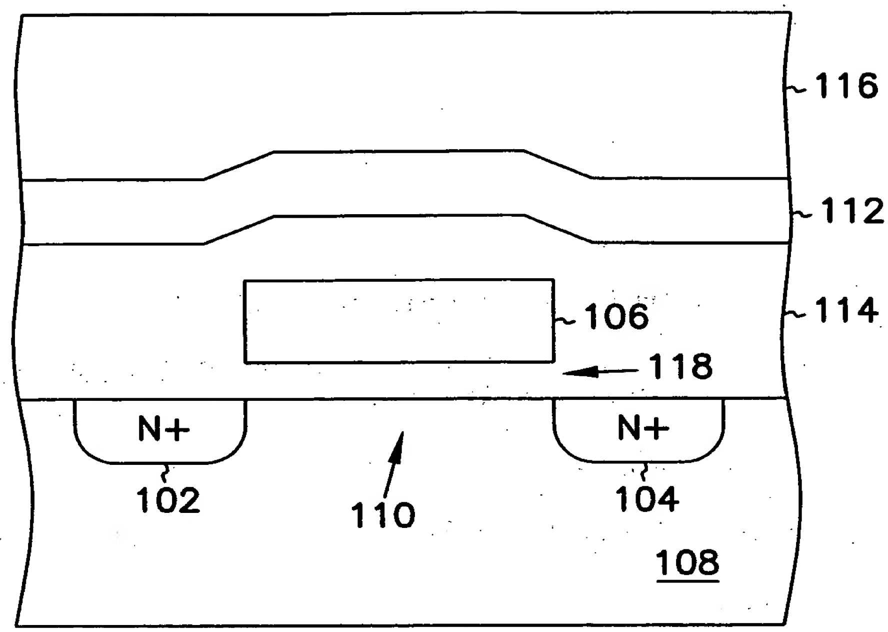
116
112
114
106
118
N+
N+
102
110
104
108

FIG. 1

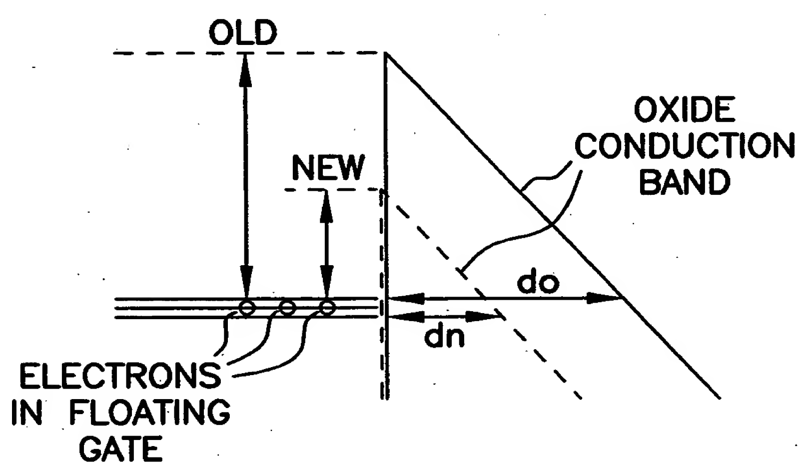
OLD
NEW
OXIDE
CONDUCTION
BAND
do
dn
ELECTRONS
IN FLOATING
GATE

FIG.2

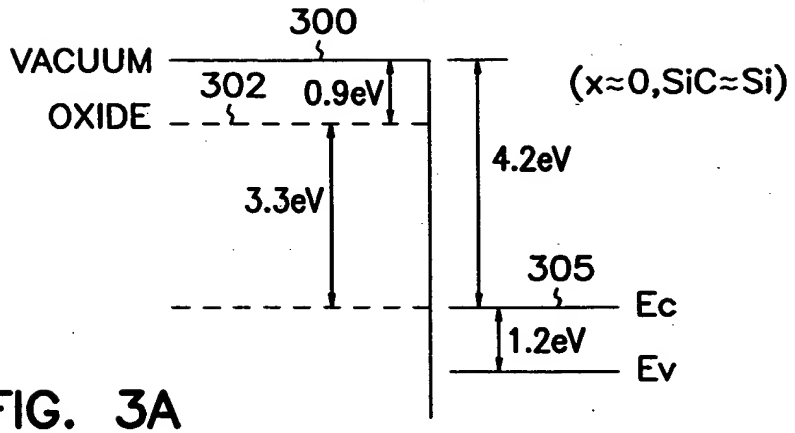

FIG. 3A

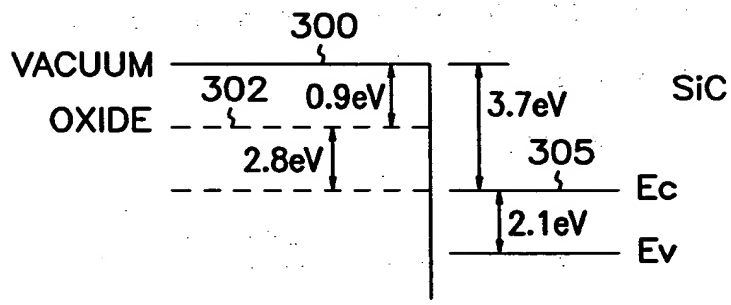

FIG. 3B

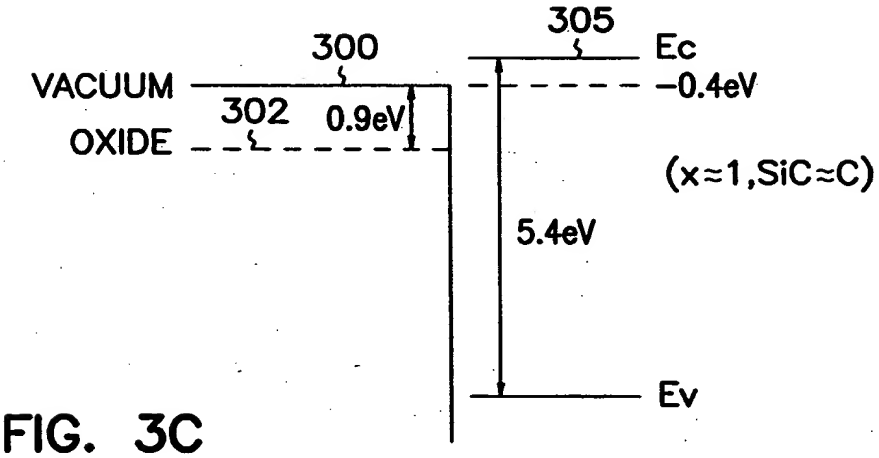

FIG. 3C

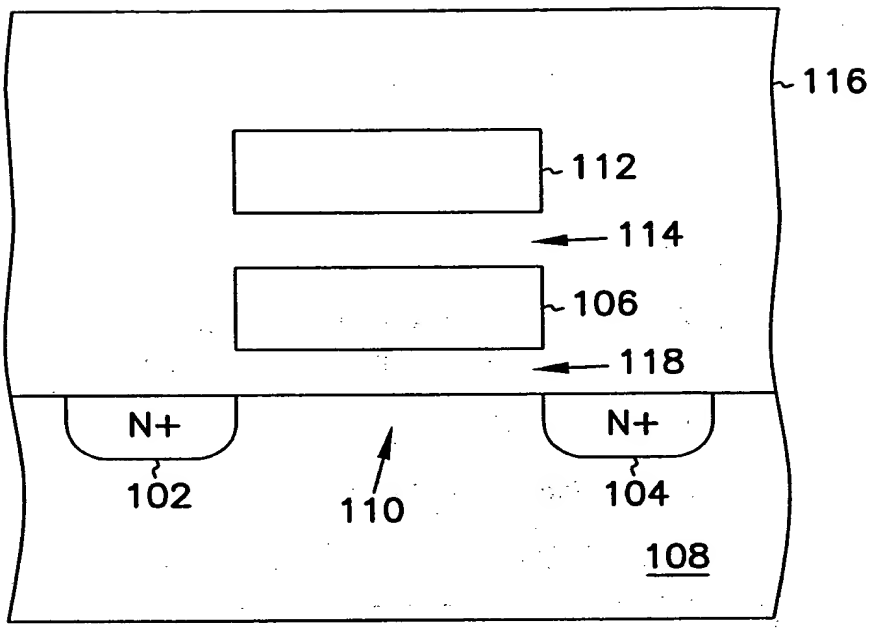

FIG. 4

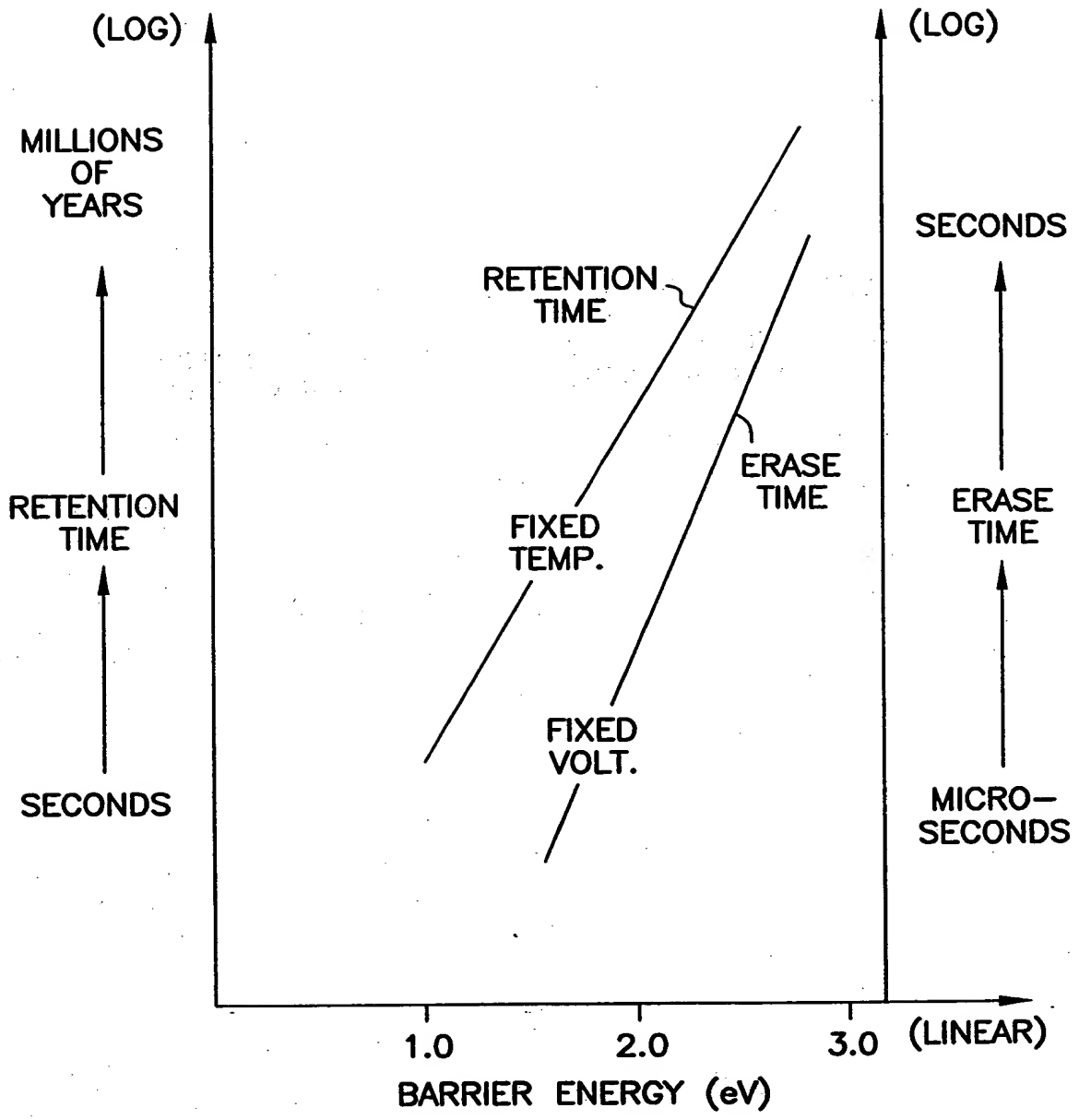
(LOG)
MILLIONS OF YEARS
RETENTION TIME
SECONDS
RETENTION TIME
FIXED TEMP.
ERASE TIME
FIXED VOLT.
(LOG)
SECONDS
ERASE TIME
MICRO-SECONDS
1.0
2.0
3.0
(LINEAR)
BARRIER ENERGY (eV)

FIG. 5

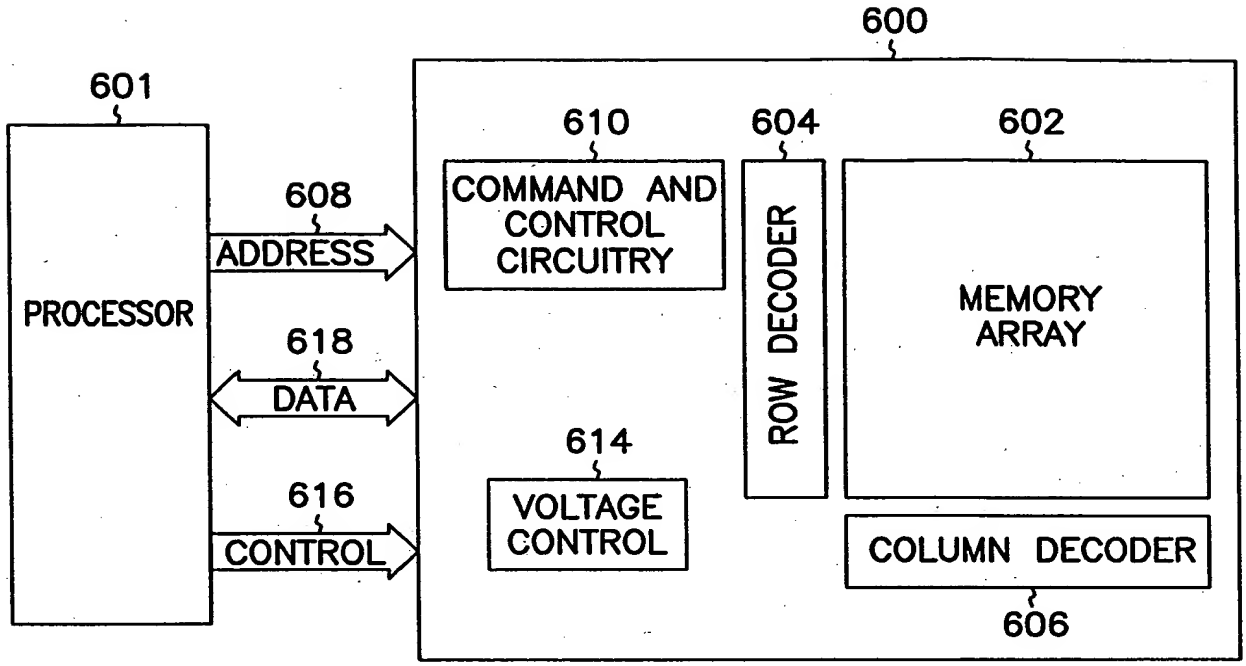
600
601
PROCESSOR
608
ADDRESS
618
DATA
616
CONTROL
610
COMMAND AND CONTROL CIRCUITRY
604
ROW DECODER
602
MEMORY ARRAY
614
VOLTAGE CONTROL
COLUMN DECODER
606

FIG. 6

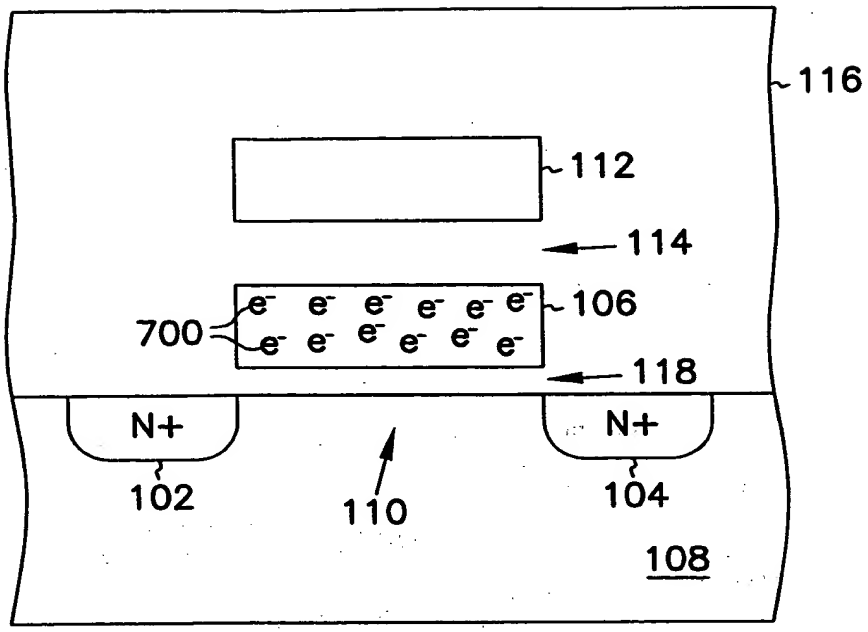
116
112
114
106
700
118
N+
N+
102
110
104
108

FIG. 7

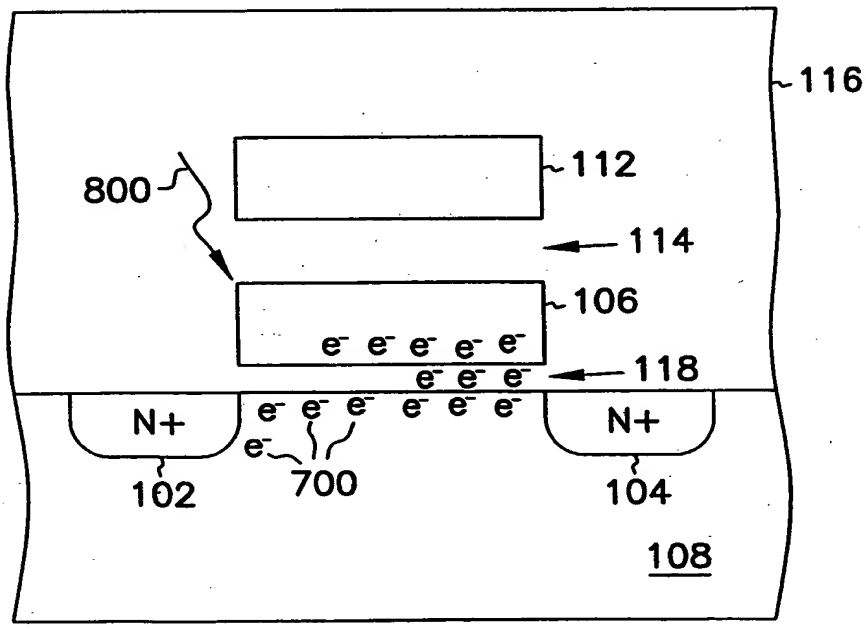
116
800
112
114
106
118
N+
N+
700
102
104
108

FIG. 8

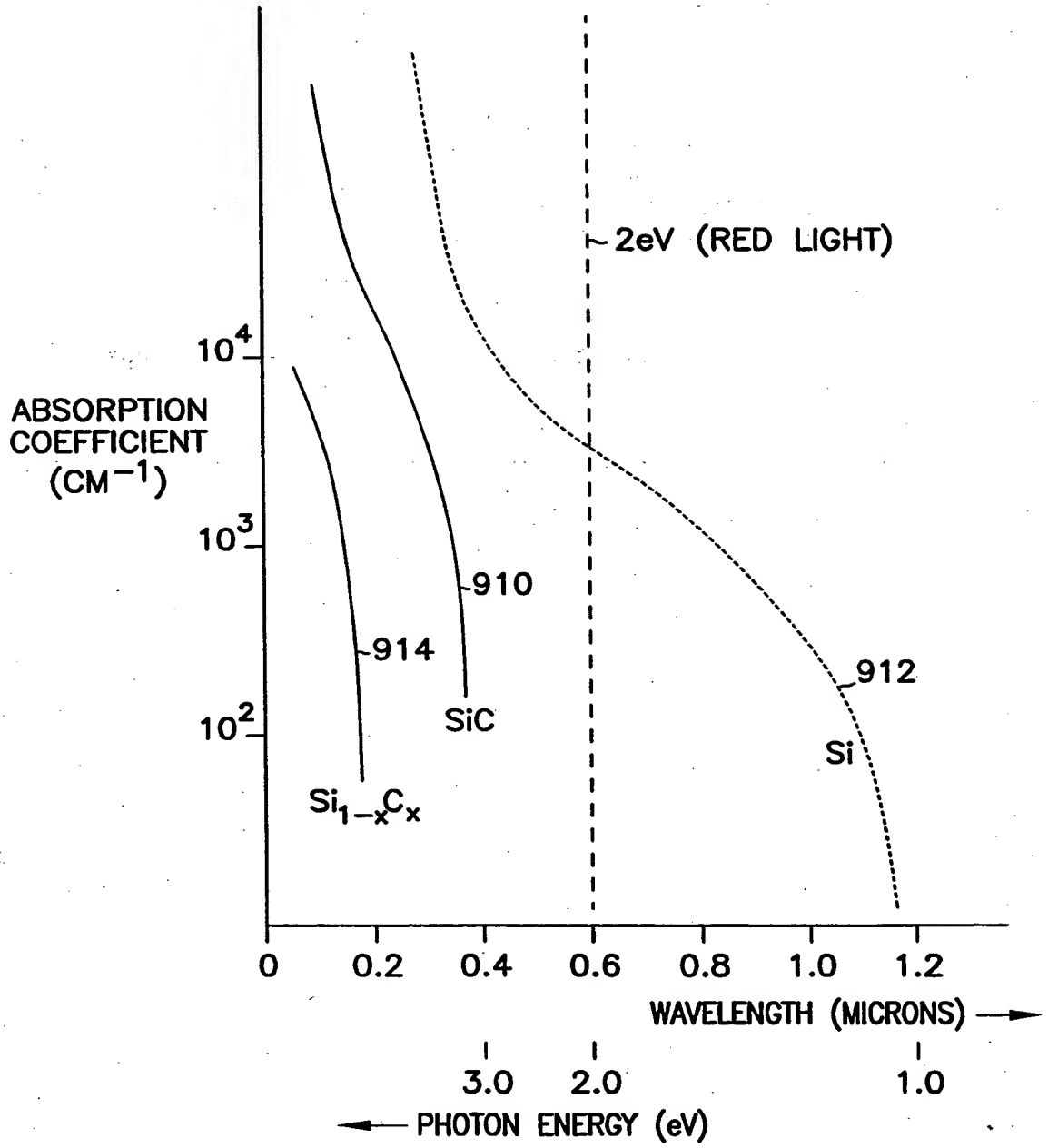
2eV (RED LIGHT)
ABSORPTION COEFFICIENT (CM^{-1})
10^4
10^3
10^2
910
914
912
SiC
Si
$Si_{1-x}C_x$
0
0.2
0.4
0.6
0.8
1.0
1.2
WAVELENGTH (MICRONS)
3.0
2.0
1.0
PHOTON ENERGY (eV)

FIG. 9

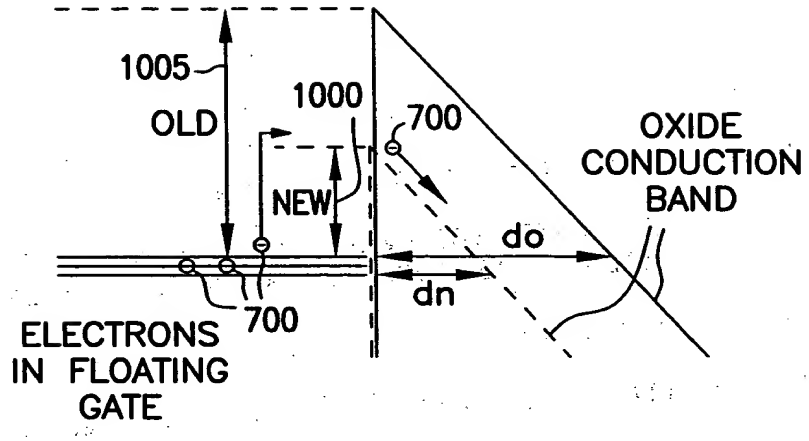
1005
OLD
1000
NEW
700
OXIDE
CONDUCTION
BAND
do
dn
700
ELECTRONS
IN FLOATING
GATE

FIG. 10

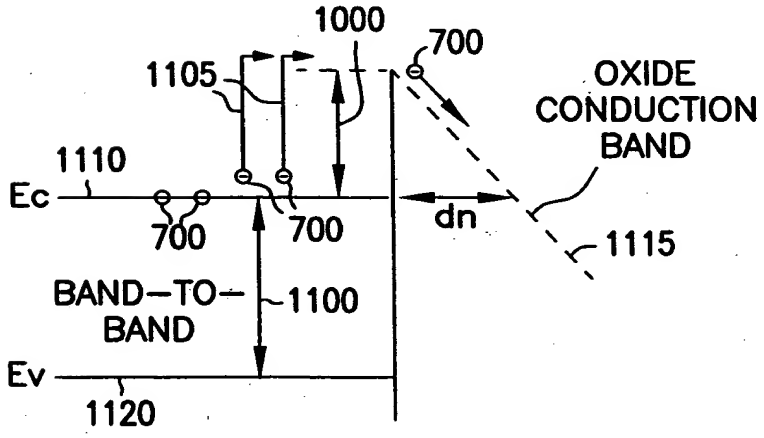
1000
700
1105
OXIDE
CONDUCTION
BAND
1110
Ec
700
700
dn
1115
BAND–TO–
BAND
1100
Ev
1120

FIG. 11

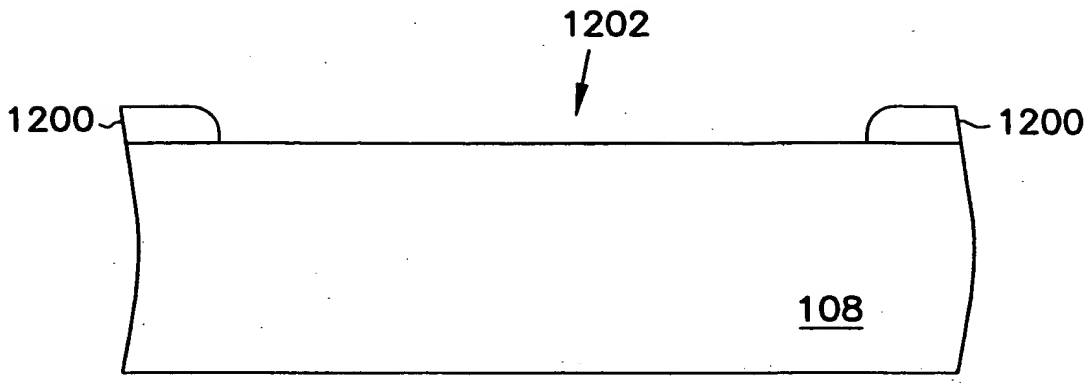

FIG. 12A

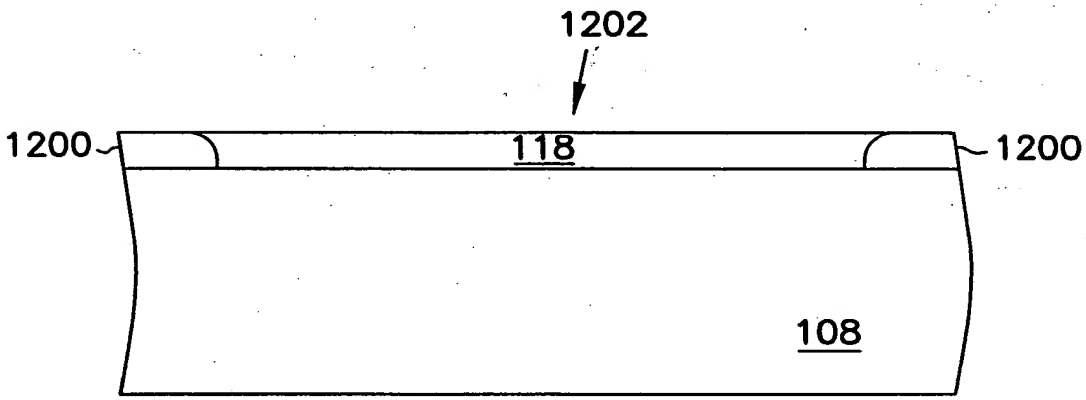

FIG. 12B

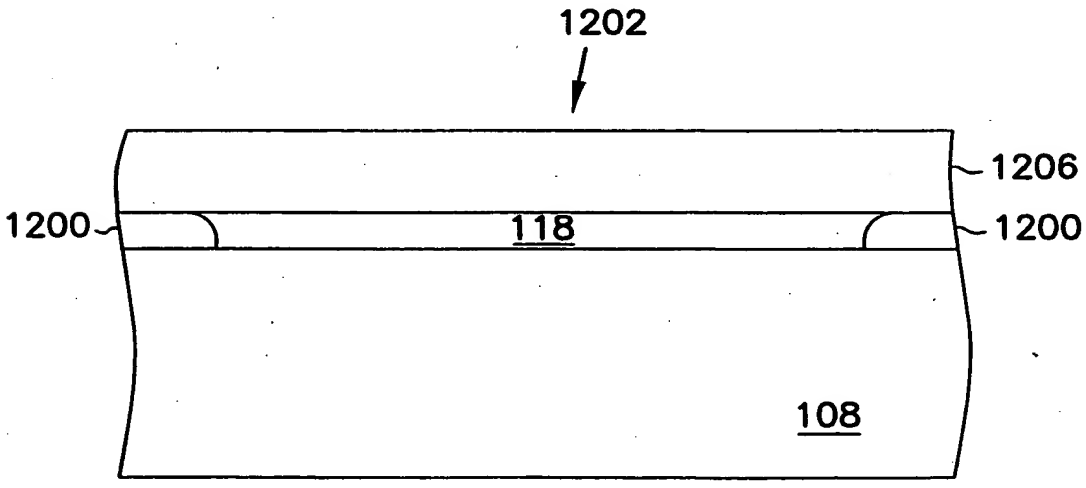

FIG. 12C

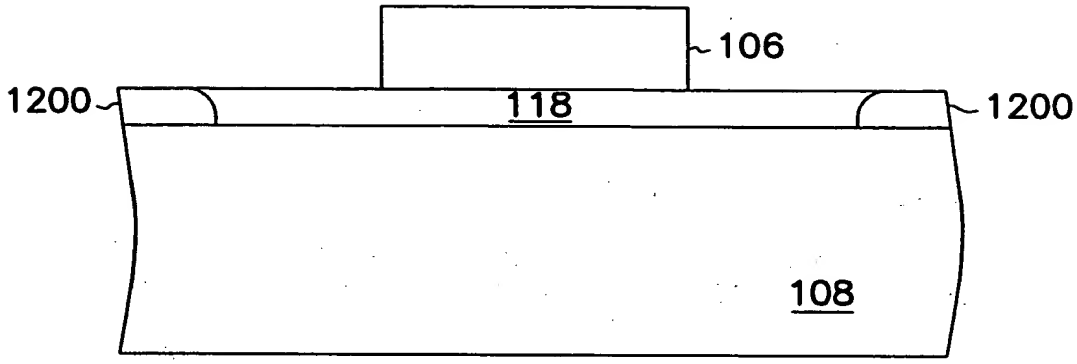

FIG. 12D

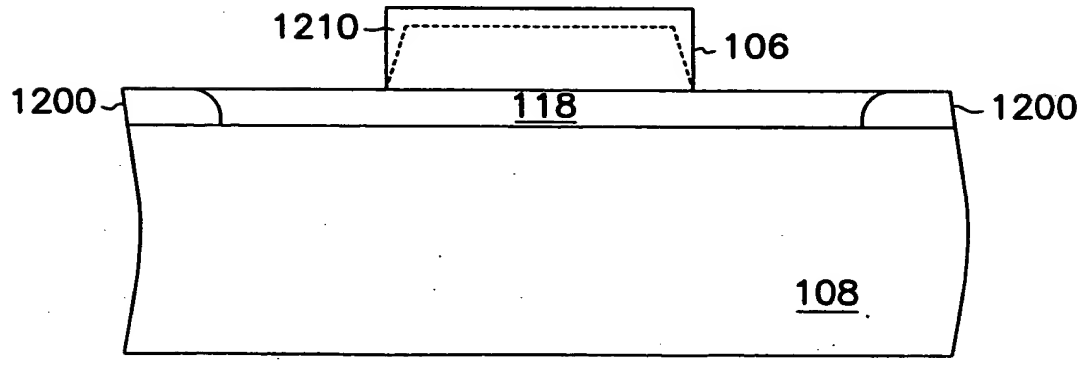

FIG. 12E

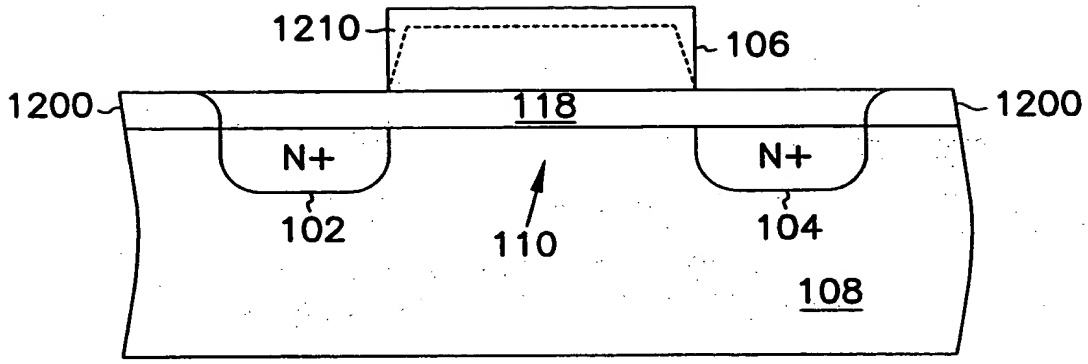

FIG. 12F

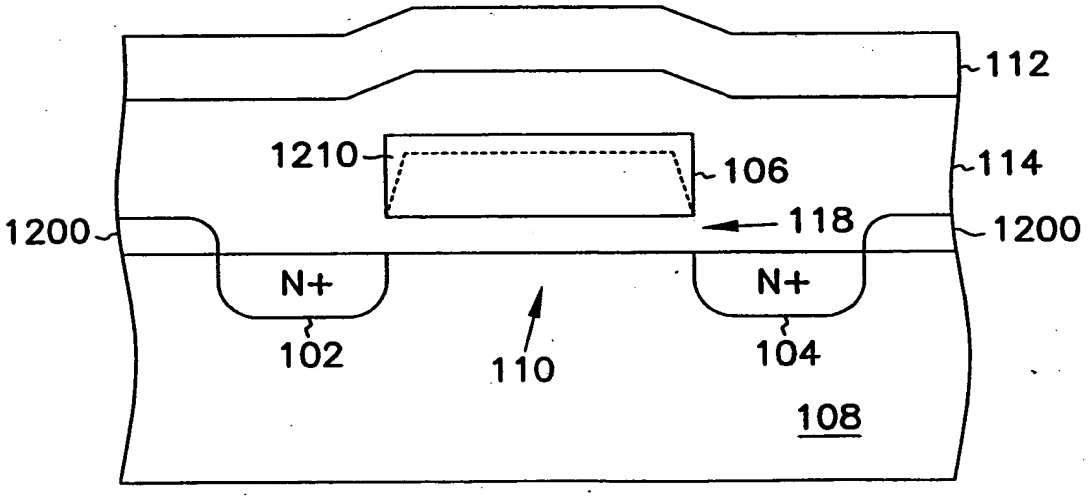

FIG. 12G